ELSEVIER

Surface Science 418 (1998) 555–558

surface science

Author index

Abellán, J., R. Chicón and A. Arenas, Properties of nanowires in air. Controlled values of conductance 418 (1998) 493
Aebi, P., see Diederich 418 (1998) 219
Ajustron, F., see Pechou 418 (1998) 1
Åkerlund, C., I. Zoric and B. Kasemo, Displacement of O_2 from Pt(111) by incident CO: dynamics and kinetics 418 (1998) 543
Akiyama, R., T. Matsumoto and T. Kawai, Dipole-controlled manipulation of DNA base molecules 418 (1998) L73
Andersen, J.N., see Wiklund 418 (1998) 210
Andersen, J.N., see Beutler 418 (1998) 457
Aprà, E., see Bredov 418 (1998) 150
Arenas, A., see Abellán 418 (1998) 493
Arumainayagam, C.R., see Queeney 418 (1998) L31
Aydil, E.S., see Ramalingam 418 (1998) L8

Babaev, V.G., see Khvostov 418 (1998) L20
Balaji, A., see Queeney 418 (1998) L31
Baudoing-Savois, R., see Saint-Lager 418 (1998) 485
Bauer, E., see Pavlovska 418 (1998) 122
Bauer, E., see Fedorus 418 (1998) 420
Beauvillain, J., see Pechou 418 (1998) 1
Bełtowska-Brzezinska, M., T. Łuczak and R. Holze, On adsorption of monohydric alcohols and diols at sp and sd metal electrodes 418 (1998) 281
Bennett, R.A., see Stone 418 (1998) 71
Bertrams, Th., see Frederick 418 (1998) 407
Beutler, A., see Wiklund 418 (1998) 210
Beutler, A., A. Sandell, A.J. Jaworowski, M. Wiklund, R. Nyholm and J.N. Andersen, The influence of preadsorbed oxygen on the adsorption of CO on two-dimensional Pd islands on a Rh(111) surface 418 (1998) 457
Blowers, P., see Chen 418 (1998) 329
Boag, N.M., see Welipitiya 418 (1998) 466
Bond, P., P.N. Brier, J. Fletcher, W.J. Jia, H. Price and P.A. Gorry, Reactive scattering study of etching dynamics: Cl_2 on GaAs(100) 418 (1998) 181
Borca, C.N., see Welipitiya 418 (1998) 466
Bourguignon, B., S. Carrez, B. Dragnea and H. Dubost, Vibrational spectroscopy of imperfect CO/Pd(111) surfaces obtained by adsorption between 150 and 230 K 418 (1998) 171
Bowker, M., see Stone 418 (1998) 71
Brandner, B., see Zecho 418 (1998) L26
Bredov, T., E. Aprà, M. Catti and G. Pacchioni, Cluster and periodic ab-initio calculations on K/TiO_2(110) 418 (1998) 150
Bremer, J., see Hansen 418 (1998) L58
Brier, P.N., see Bond 418 (1998) 181
Bürgler, D.E., see Schmidt 418 (1998) 314

Carrez, S., see Bourguignon 418 (1998) 171
Catti, M., see Bredov 418 (1998) 150
Cavicchi, R., V. Sukharev and S. Semancik, Time-dependent conductance of Pd-dosed SnO_2 (110) 418 (1998) L81
Chang, C.-C., see Hung 418 (1998) 46
Chaturvedi, S., see Jirsak 418 (1998) 8
Chen, N., P. Blowers, R.I. Masel, Evidence for carbocation formation during the coadsorption of methanol and hydrogen on Pt(110) 418 (1998) 329
Chen, Q., see Frederick 418 (1998) 407
Chen, Y., see Zhuang 418 (1998) 139
Cheng, C.-P., see Pi 418 (1998) 113
Chicón, R., see Abellán 418 (1998) 493
Chin, W.S., see Huang 418 (1998) 320
Christmann, K., see Schlatterbeck 418 (1998) 240
Collazo-Davila, C., D. Grozea, L.D. Marks, R. Feidenhans'l, M. Nielsen, L. Seehofer, L. Lottermoser, G. Falkenberg, R.L. Johnson, M. Göthelid and U. Karlsson, Solution of Ge(111)-(4 × 4)-Ag structure using direct methods applied to X-ray diffraction data 418 (1998) 395
Contreras-Solorio, D.A., see Vlaev 418 (1998) 536
Coratger, R., see Pechou 418 (1998) 1

De Diego, N., see Mikhin 418 (1998) 166
De Santis, M., see Meyerheim 418 (1998) 295
De Santis, M., see Saint-Lager 418 (1998) 485
Diederich, L., O.M. Küttel, P. Aebi and L. Schlapbach, Electron affinity and work function of differently oriented and doped diamond surfaces determined by photoelectron spectroscopy 418 (1998) 219
Dillon, A.C., see Klaus 418 (1998) L14
Dillon, A.C., see Okada 418 (1998) 353
Diño, W.A., H. Kasai and A. Okiji, Dynamical quantum filtering in hydrogen–surface reactions 418 (1998) L39
Doblhofer, K., see Zemlyanov 418 (1998) 441

Dolle, P., see Saint-Lager 418 (1998) 485
Dowben, P.A., see Welipitiya 418 (1998) 466
Dragnea, B., see Bourguignon 418 (1998) 171
Driver, S.M., see Knight 418 (1998) 521
Dubost, H., see Bourguignon 418 (1998) 171
Dunphy, J.C., see Tilinin 418 (1998) 511

Einstein, T.L., see Schwennicke 418 (1998) 22
Eisenmenger, W., see Strohmaier 418 (1998) 91
Ertl, G., see Kim 418 (1998) 267

Falkenberg, G., see Collazo-Davila 418 (1998) 395
Fedorus, A. and E. Bauer, Structure and stability of metastable transition metal clusters on W(011) 418 (1998) 420
Feidenhans'l, R., see Grozea 418 (1998) 32
Feidenhans'l, R., see Collazo-Davila 418 (1998) 395
Fletcher, J., see Bond 418 (1998) 181
Frederick, B.G., T. Hildebrand, C.C. Perry, Q. Chen, A.W. Munz, Th. Bertrams, V. Zielasek, N.V. Richardson and M. Henzler, Inelastic diffraction in coadsorbed periodic structures 418 (1998) 407
Friend, C.M., see Queeney 418 (1998) L31
Fujita, T. and K. Tanaka, Controlled epitaxial growth of Cu and Ni islands on oxygen-preadsorbed Cu(100) surfaces 418 (1998) L45

Gardner, P., see Pilling 418 (1998) L1
Gauthier, Y., see Saint-Lager 418 (1998) 485
Ge, Q., D.A. King, N. Marzari and M.C. Payne, First principles calculation of the energy and structure of two solid surface phases on Ir{100} 418 (1998) 529
George, S.M., see Klaus 418 (1998) L14
George, S.M., see Okada 418 (1998) 353
Gobulukoglu, I., see Welipitiya 418 (1998) 466
Gompf, B., see Strohmaier 418 (1998) 91
Gorry, P.A., see Bond 418 (1998) 181
Göthelid, M., see Collazo-Davila 418 (1998) 395
Grozea, D., E. Landree, L.D. Marks, R. Feidenhans'l, M. Nielsen and R.L. Johnson, Direct methods determination of the Si(111)-(6 × 6)Au surface structure 418 (1998) 32
Grozea, D., see Collazo-Davila 418 (1998) 395
Güntherodt, H.-J., see Schmidt 418 (1998) 314
Guseva, M.B., see Khvostov 418 (1998) L20

Haneman, D., see Zhao 418 (1998) 132
Hansen, J.-K., J. Bremer and O. Hunderi, The electronic structure of Cu(110) and Ag(110) surfaces studied by reflection anisotropy spectroscopy 418 (1998) L58
Henzler, M., see Frederick 418 (1998) 407
Hildebrand, T., see Frederick 418 (1998) 407
Holze, R., see Bełtowska-Brzezinska 418 (1998) 281
Hong, I.-H., see Pi 418 (1998) 113
Hrbek, J., see Jirsak 418 (1998) 8
Hsieh, J.-T., see Hung 418 (1998) 46
Huang, H.H., X. Jiang, H.L. Siew, W.S. Chin and G.Q. Xu, Oxygen coadsorption and reaction with potassium on MgO thin films grown on Ru(001) 418 (1998) 320
Hunderi, O., see Hansen 418 (1998) L58
Hung, W.-H., J.-T. Hsieh, H.-L. Hwang, H.-Y. Hwang and C.-C. Chang, Surface etching of InP(100) by chlorine 418 (1998) 46
Hwang, H.-L., see Hung 418 (1998) 46
Hwang, H.-Y., see Hung 418 (1998) 46

Jaworowski, A., see Wiklund 418 (1998) 210
Jaworowski, A.J., see Beutler 418 (1998) 457
Jia, W.J., see Bond 418 (1998) 181
Jiang, H., see Welipitiya 418 (1998) 466
Jiang, X., see Huang 418 (1998) 320
Jirsak, T., J.A. Rodriguez, S. Chaturvedi and J. Hrbek, Chemistry of SO_2 on Ru(001): formation of SO_3 and SO_4 418 (1998) 8
Johnson, R.L., see Grozea 418 (1998) 32
Johnson, R.L., see Collazo-Davila 418 (1998) 395

Karlsson, U., see Collazo-Davila 418 (1998) 395
Kasai, H., see Diño 418 (1998) L39
Kasemo, B., see Zhdanov 418 (1998) 84
Kasemo, B., see Åkerlund 418 (1998) 543
Kauraala, K., see Lahtinen 418 (1998) 502
Kawai, T., see Akiyama 418 (1998) L73
Kelires, P.C., Theoretical investigation of the equilibrium surface structure of $Si_{1-x-y}Ge_xC_y$ alloys 418 (1998) L62
Khvostov, V.V., V.G. Babaev, O.Yu. Sokol, E.N. Shouleshov and M.B. Guseva, Ion neutralization at ionic crystal surfaces 418 (1998) L20
Kim, Y.D., S. Wendt, S. Schwegmann, H. Over and G. Ertl, Structural analyses of the pure and cesiated Ru(0001)–(2 × 2)-3O phase 418 (1998) 267
King, D.A., see Ge 418 (1998) 529
Klaus, J.W., A.W. Ott, A.C. Dillon and S.M. George, Atomic layer controlled growth of Si_3N_4 films using sequential surface reactions 418 (1998) L14
Knight, P.J., R. Toomes, S.M. Driver and D.P. Woodruff, Oxidation of the Cu(100)c(2 × 2)-Mn surface: epitaxial manganese oxide 418 (1998) 521
Korte, U., see McCoy 418 (1998) 273
Kuhlmann, T., see Müller 418 (1998) 256
Küppers, J., see Zecho 418 (1998) L26
Küttel, O.M., see Diederich 418 (1998) 219

Lahtinen, J., J. Vaari and K. Kauraala, Adsorption and structure dependent desorption of CO on Co(0001) 418 (1998) 502
Landree, E., see Grozea 418 (1998) 32
Lee, W.T., F. Thomas and R.I. Masel, Methanol oxidation on (2 × 1)Pt(110): does the C–O or O–H bond break first? 418 (1998) 479
Leising, G., see Müller 418 (1998) 256
Lischka, K., see Müller 418 (1998) 256
Lottermoser, L., see Collazo-Davila 418 (1998) 395
Łuczak, T., see Bełtowska-Brzezinska 418 (1998) 281

Makeev, A.G. and B.E. Nieuwenhuys, Simulation of oscillatory behaviour in the $NO + H_2$ reaction on a partially reconstructed Pt(100) surface 418 (1998) 432
Maksym, P.A., see McCoy 418 (1998) 273
Marks, L.D., see Grozea 418 (1998) 32
Marks, L.D., see Collazo-Davila 418 (1998) 395
Maroudas, D., see Ramalingam 418 (1998) L8
Maroudas, D., see Zepeda-Ruiz 418 (1998) L68
Marzari, N., see Ge 418 (1998) 529
Masel, R.I., see Chen 418 (1998) 329
Masel, R.I., see Lee 418 (1998) 479
Matsumoto, T., see Akiyama 418 (1998) L73
McCoy, J.M., U. Korte and P.A. Maksym, Determination of the atomic geometry of the GaAs(001)2 × 4 surface by dynamical RHEED intensity analysis: The β2(2 × 4) model 418 (1998) 273
Meisinger, F., see Schmidt 418 (1998) 314
Merrill, P.B. and S.S. Perry, Fundamental measurements of the friction of clean and oxygen-covered VC(100) with ultrahigh vacuum atomic force microscopy: evidence for electronic contributions to interfacial friction 418 (1998) 342
Meyerheim, H.L., M. De Santis, W. Moritz and I.K. Robinson, Domain-wall interactions in Bi/Cu(001) 418 (1998) 295
Mikhin, A.G. and N. de Diego, Surface vacancy diffusion on Cu(111): a computer simulation study 418 (1998) 166
Mitrelias, T., Acoustic excitation influence on the oscillatory CO oxidation reaction over a Pt{110} crystal 418 (1998) 105
Miwa, R.H., Theoretical study of Si–Ge mixed dimers on Si(001) surfaces 418 (1998) 55
Mola, E.E., V.A. Ranea and J.L. Vicente, Underlayer chemisorption of C on Al(111) 418 (1998) 367
Moritz, W., see Meyerheim 418 (1998) 295
Müller, B., T. Kuhlmann, K. Lischka, H. Schwer, R. Resel and G. Leising, MBE growth of *para*-hexaphenyl on GaAs(001)-2 × 4 418 (1998) 256
Munz, A.W., see Frederick 418 (1998) 407
Muro-Ortega, M.R., see Vlaev 418 (1998) 536

Nielsen, M., see Grozea 418 (1998) 32
Nielsen, M., see Collazo-Davila 418 (1998) 395
Nieuwenhuys, B.E., see Makeev 418 (1998) 432
Nyholm, R., see Wiklund 418 (1998) 210
Nyholm, R., see Beutler 418 (1998) 457

Okada, L.A., A.C. Dillon, A.W. Ott and S.M. George, Adsorption and decomposition of 1,4-disilabutane ($SiH_3CH_2CH_2SiH_3$) on Si(100)2 × 1 and porous silicon surfaces 418 (1998) 353
Okiji, A., see Diño 418 (1998) L39
Ott, A.W., see Klaus 418 (1998) L14
Ott, A.W., see Okada 418 (1998) 353
Over, H., see Kim 418 (1998) 267

P.N. Ross, Jr., see Zhuang 418 (1998) 139
Pacchioni, G., see Bredov 418 (1998) 150
Padilla, J. and D. Vanderbilt, Ab initio study of $SrTiO_3$ surfaces 418 (1998) 64
Paredes Olivera, P., E.M. Patrito and H. Sellers, Adsorption of sulfate, bisulfate and sulfuric acid on silver surfaces: a theoretical study 418 (1998) 376
Parschau, M., see Schlatterbeck 418 (1998) 240
Patrito, E.M., see Paredes Olivera 418 (1998) 376
Pavlovska, A., K. Starbova, N. Starbov and E. Bauer, Impurity-induced faceting of Pb surfaces 418 (1998) 122
Payne, M.C., see Ge 418 (1998) 529
Pechou, R., R. Coratger, F. Ajustron and J. Beauvillain, Control of light emission from an STM and surface modifications 418 (1998) 1
Pemble, M.E., see Pilling 418 (1998) L1
Perry, C.C., see Frederick 418 (1998) 407
Perry, S.S., see Merrill 418 (1998) 342
Petersen, J., see Strohmaier 418 (1998) 91
Pi, T.-W., C.-P. Cheng and I.-H. Hong, Si 2p core level spectroscopy in Si(001)2 × 1: the charge-transfer effect 418 (1998) 113
Pilling, M.J., P. Gardner, M.E. Pemble and M. Surman, A far-infrared RAIRS investigation of $SnCl_4$ on a silica surface using the buried metal layer approach 418 (1998) L1
Polak, M., see Rubinovich 418 (1998) L53
Poulston, S., see Stone 418 (1998) 71
Price, H., see Bond 418 (1998) 181
Price, N.J., see Stone 418 (1998) 71

Queeney, K.T., C.R. Arumainayagam, A. Balaji and C.M. Friend, Carbon–carbon coupling from formaldehyde reaction on Mo(110) 418 (1998) L31

Ramalingam, S., D. Maroudas, E.S. Aydil and S.P. Walch, Abstraction of hydrogen by SiH_3 from hydrogen-terminated Si(001)-(2 × 2) surfaces 418 (1998) L8
Ranea, V.A., see Mola 418 (1998) 367
Resel, R., see Müller 418 (1998) 256
Richardson, N.V., see Frederick 418 (1998) 407
Robertson, B.W., see Welipitiya 418 (1998) 466
Robinson, I.K., see Meyerheim 418 (1998) 295
Rodriguez, J.A., see Jirsak 418 (1998) 8
Rose, M.K., see Tilinin 418 (1998) 511
Rubinovich, L. and M. Polak, On the surface composition of intermetallic compounds: the case of $MgNi_2$ 418 (1998) L53
Rummel, R.-M. and C. Ziegler, 5849 418 (1998) 303

Saint-Lager, M.C., R. Baudoing-Savois, M. De Santis, P. Dolle and Y. Gauthier, Thickness effect on alloying of ultrathin Co films on Pt(111): a real time and in situ UHV study with synchrotron X-ray diffraction 418 (1998) 485
Salmeron, M., see Tilinin 418 (1998) 511
Sandell, A., see Wiklund 418 (1998) 210
Sandell, A., see Beutler 418 (1998) 457
Savinova, E., see Zemlyanov 418 (1998) 441
Schaller, D.M., see Schmidt 418 (1998) 314
Scheybal, A., see Zemlyanov 418 (1998) 441
Schlapbach, L., see Diederich 418 (1998) 219

Schlatterbeck, D., M. Parschau and K. Christmann, Silver films grown on a rhenium (0001) surface: a combined TDS, XPS, and $\Delta\Phi$ study 418 (1998) 240
Schlögl, R., see Zemlyanov 418 (1998) 441
Schmidt, C.M., D.M. Schaller, F. Meisinger, D.E. Bürgler and H.-J. Güntherodt, Solid phase epitaxy of a ternary system 418 (1998) 314
Schwegmann, S., see Kim 418 (1998) 267
Schwennicke, C., X.-S. Wang, T.L. Einstein and E.D. Williams, Evolution of surface morphology of vicinal Si(111) surfaces after aluminum deposition 418 (1998) 22
Schwer, H., see Müller 418 (1998) 256
Seehofer, L., see Collazo-Davila 418 (1998) 395
Sellers, H., see Paredes Olivera 418 (1998) 376
Semancik, S., see Cavicchi 418 (1998) L81
Shouleshov, E.N., see Khvostov 418 (1998) L20
Siew, H.L., see Huang 418 (1998) 320
Sokol, O.Yu., see Khvostov 418 (1998) L20
Somorjai, G.A., see Zasada 418 (1998) L89
Sorensen, S.L., see Wiklund 418 (1998) 210
Starbov, N., see Pavlovska 418 (1998) 122
Starbova, K., see Pavlovska 418 (1998) 122
Stone, P., S. Poulston, R.A. Bennett, N.J. Price and M. Bowker, An STM, TPD and XPS investigation of formic acid adsorption on the oxygen-precovered $c(6 \times 2)$ surface of Cu(110) 418 (1998) 71
Strisland, F., see Wiklund 418 (1998) 210
Strohmaier, R., J. Petersen, B. Gompf and W. Eisenmenger, A systematic STM study of planar aromatic molecules on inorganic substrates. I. Submolecular image contrast 418 (1998) 91
Sukharev, V., see Cavicchi 418 (1998) L81
Surman, M., see Pilling 418 (1998) L1

Tanaka, K., see Fujita 418 (1998) L45
Thomas, F., see Lee 418 (1998) 479
Tilinin, I.S., M.K. Rose, J.C. Dunphy, M. Salmeron and M.A. Van Hove, Identification of adatoms on metal surfaces by STM: experiment and theory 418 (1998) 511
Toomes, R., see Knight 418 (1998) 521

Vaari, J., see Lahtinen 418 (1998) 502
Van Hove, M.A., see Zasada 418 (1998) L89
Van Hove, M.A., see Tilinin 418 (1998) 511
Vanderbilt, D., see Padilla 418 (1998) 64
Velasco, V.R., see Vlaev 418 (1998) 536
Vicente, J.L., see Mola 418 (1998) 367
Vlaev, S.J., M.R. Muro-Ortega, D.A. Contreras-Solorio and V.R. Velasco, Electronic states in near-surface quantum wells 418 (1998) 536

Walch, S.P., see Ramalingam 418 (1998) L8
Waldfried, C., see Welipitiya 418 (1998) 466
Wang, X.-S., see Schwennicke 418 (1998) 22
Weinberg, W.H., see Zepeda-Ruiz 418 (1998) L68
Welipitiya, D., C. Waldfried, C.N. Borca, P.A. Dowben, N.M. Boag, H. Jiang, I. Gobulukoglu and B.W. Robertson, The adsorption of nickelocene. Part 2: decomposition and selective area deposition 418 (1998) 466
Wendt, S., see Kim 418 (1998) 267
Wiklund, M., A. Jaworowski, F. Strisland, A. Beutler, A. Sandell, R. Nyholm, S.L. Sorensen and J.N. Andersen, Vibrational fine structure in the C 1s photoemission spectrum of the methoxy species chemisorbed on Cu(100) 418 (1998) 210
Wiklund, M., see Beutler 418 (1998) 457
Williams, E.D., see Schwennicke 418 (1998) 22
Woodruff, D.P., see Knight 418 (1998) 521

Xu, G.Q., see Huang 418 (1998) 320

Zasada, I., M.A. Van Hove and G.A. Somorjai, Reanalysis of the Rh(111) + (2 × 2)-3NO structure using automated tensor LEED 418 (1998) L89
Zecho, Th., B. Brandner and J. Küppers, Abstraction of D adsorbed on Pt(100) surfaces by gaseous H atoms: effect of surface heterogeneity 418 (1998) L26
Zemlyanov, D.Y., E. Savinova, A. Scheybal, K. Doblhofer and R. Schlögl, XPS observation of OH groups incorporated in an Ag(111) electrode 418 (1998) 441
Zepeda-Ruiz, L.A., D. Maroudas and W.H. Weinberg, Semicoherent interface formation and structure in InAs/GaAs(111)A heteroepitaxy 418 (1998) L68
Zhao, D. and D. Haneman, LEED structures in Si(111) surfaces quenched from elevated-temperature cleavages 418 (1998) 132
Zhdanov, V.P. and B. Kasemo, Non-thermal surface roughening in catalytic reactions 418 (1998) 84
Zhuang, G., Y. Chen and P.N. Ross, Jr., The reaction of lithium with carbon dioxide studied by photoelectron spectroscopy 418 (1998) 139
Ziegler, C., see Rummel 418 (1998) 303
Zielasek, V., see Frederick 418 (1998) 407
Zoric, I., see Åkerlund 418 (1998) 543

ELSEVIER

Surface Science 418 (1998) 559–566

surface science

Subject index

THEORETICAL METHODS, MODELS AND TECHNIQUES

Ab initio quantum chemical methods and calculations

T. Bredov, E. Aprà, M. Catti and G. Pacchioni, Cluster and periodic ab-initio calculations on $K/TiO_2(110)$ 418 (1998) 150

N. Chen, P. Blowers, R.I. Masel, Evidence for carbocation formation during the coadsorption of methanol and hydrogen on Pt(110) 418 (1998) 329

P. Paredes Olivera, E.M. Patrito and H. Sellers, Adsorption of sulfate, bisulfate and sulfuric acid on silver surfaces: a theoretical study 418 (1998) 376

Computer simulations

D. Grozea, E. Landree, L.D. Marks, R. Feidenhans'l, M. Nielsen and R.L. Johnson, Direct methods determination of the Si(111)-(6 × 6)Au surface structure 418 (1998) 32

V.P. Zhdanov and B. Kasemo, Non-thermal surface roughening in catalytic reactions 418 (1998) 84

A.G. Mikhin and N. de Diego, Surface vacancy diffusion on Cu(111): a computer simulation study 418 (1998) 166

P.C. Kelires, Theoretical investigation of the equilibrium surface structure of $Si_{1-x-y}Ge_xC_y$ alloys 418 (1998) L62

L.A. Zepeda-Ruiz, D. Maroudas and W.H. Weinberg, Semicoherent interface formation and structure in InAs/GaAs(111)A heteroepitaxy 418 (1998) L68

C. Collazo-Davila, D. Grozea, L.D. Marks, R. Feidenhans'l, M. Nielsen, L. Seehofer, L. Lottermoser, G. Falkenberg, R.L. Johnson, M. Göthelid and U. Karlsson, Solution of Ge(111)-(4 × 4)-Ag structure using direct methods applied to X-ray diffraction data 418 (1998) 395

Density functional calculations

S. Ramalingam, D. Maroudas, E.S. Aydil and S.P. Walch, Abstraction of hydrogen by SiH_3 from hydrogen-terminated Si(001)-(2 × 2) surfaces 418 (1998) L8

R.H. Miwa, Theoretical study of Si–Ge mixed dimers on Si(001) surfaces 418 (1998) 55

J. Padilla and D. Vanderbilt, Ab initio study of $SrTiO_3$ surfaces 418 (1998) 64

Q. Ge, D.A. King, N. Marzari and M.C. Payne, First principles calculation of the energy and structure of two solid surface phases on Ir{100} 418 (1998) 529

Electron–solid interactions, scattering, diffraction

I. Zasada, M.A. Van Hove and G.A. Somorjai, Reanalysis of the Rh(111) + (2 × 2)-3NO structure using automated tensor LEED 418 (1998) L89

Equilibrium thermodynamics and statistical mechanics

L. Rubinovich and M. Polak, On the surface composition of intermetallic compounds: the case of $MgNi_2$ 418 (1998) L53

P.C. Kelires, Theoretical investigation of the equilibrium surface structure of $Si_{1-x-y}Ge_xC_y$ alloys 418 (1998) L62

L.A. Zepeda-Ruiz, D. Maroudas and W.H. Weinberg, Semicoherent interface formation and structure in InAs/GaAs(111)A heteroepitaxy 418 (1998) L68

Ion–solid interactions, scattering, channeling

V.V. Khvostov, V.G. Babaev, O.Yu. Sokol, E.N. Shouleshov and M.B. Guseva, Ion neutralization at ionic crystal surfaces 418 (1998) L20

Models of surface chemical reactions

W.A. Diño, H. Kasai and A. Okiji, Dynamical quantum filtering in hydrogen–surface reactions 418 (1998) L39

V.P. Zhdanov and B. Kasemo, Non-thermal surface roughening in catalytic reactions 418 (1998) 84

R. Cavicchi, V. Sukharev and S. Semancik, Time-dependent conductance of Pd-dosed SnO_2 (110) 418 (1998) L81

Models of surface kinetics

A.G. Makeev and B.E. Nieuwenhuys, Simulation of oscillatory behaviour in the $NO + H_2$ reaction on a partially reconstructed Pt(100) surface 418 (1998) 432

Molecular dynamics

S. Ramalingam, D. Maroudas, E.S. Aydil and S.P. Walch, Abstraction of hydrogen by SiH_3 from hydrogen-terminated Si(001)-(2 × 2) surfaces 418 (1998) L8

A.G. Mikhin and N. de Diego, Surface vacancy diffusion on Cu(111): a computer simulation study 418 (1998) 166

Semi-empirical models and model calculations

T. Jirsak, J.A. Rodriguez, S. Chaturvedi and J. Hrbek, Chemistry of SO_2 on Ru(001): formation of SO_3 and SO_4 418 (1998) 8

P.C. Kelires, Theoretical investigation of the equilibrium surface structure of $Si_{1-x-y}Ge_xC_y$ alloys 418 (1998) L62

E.E. Mola, V.A. Ranea and J.L. Vicente, Underlayer chemisorption of C on Al(111) 418 (1998) 367

S.J. Vlaev, M.R. Muro-Ortega, D.A. Contreras-Solorio and V.R. Velasco, Electronic states in near-surface quantum wells 418 (1998) 536

EXPERIMENTAL SAMPLE PREPARATION AND CHARACTERIZATION METHODS

Atomic force microscopy

J.W. Klaus, A.W. Ott, A.C. Dillon and S.M. George, Atomic layer controlled growth of Si_3N_4 films using sequential surface reactions 418 (1998) L14

B. Müller, T. Kuhlmann, K. Lischka, H. Schwer, R. Resel and G. Leising, MBE growth of *para*-hexaphenyl on GaAs(001)-2×4 418 (1998) 256

P.B. Merrill and S.S. Perry, Fundamental measurements of the friction of clean and oxygen-covered VC(100) with ultrahigh vacuum atomic force microscopy: evidence for electronic contributions to interfacial friction 418 (1998) 342

Auger electron spectroscopy

A. Pavlovska, K. Starbova, N. Starbov and E. Bauer, Impurity-induced faceting of Pb surfaces 418 (1998) 122

Chemical vapor deposition

M.J. Pilling, P. Gardner, M.E. Pemble and M. Surman, A far-infrared RAIRS investigation of $SnCl_4$ on a silica surface using the buried metal layer approach 418 (1998) L1

Electrical transport measurements

R. Cavicchi, V. Sukharev and S. Semancik, Time-dependent conductance of Pd-dosed SnO_2 (110) 418 (1998) L81

Electron energy loss spectroscopy

N. Chen, P. Blowers, R.I. Masel, Evidence for carbocation formation during the coadsorption of methanol and hydrogen on Pt(110) 418 (1998) 329

B.G. Frederick, T. Hildebrand, C.C. Perry, Q. Chen, A.W. Munz, Th. Bertrams, V. Zielasek, N.V. Richardson and M. Henzler, Inelastic diffraction in coadsorbed periodic structures 418 (1998) 407

Electron microscopy

Scanning electron microscopy (SEM)

A. Pavlovska, K. Starbova, N. Starbov and E. Bauer, Impurity-induced faceting of Pb surfaces 418 (1998) 122

Electron–solid diffraction

J.M. McCoy, U. Korte and P.A. Maksym, Determination of the atomic geometry of the GaAs(001)2×4 surface by dynamical RHEED intensity analysis: The $\beta 2(2 \times 4)$ model 418 (1998) 273

Low energy electron diffraction (LEED)

C. Schwennicke, X.-S. Wang, T.L. Einstein and E.D. Williams, Evolution of surface morphology of vicinal Si(111) surfaces after aluminum deposition 418 (1998) 22

D. Zhao and D. Haneman, LEED structures in Si(111) surfaces quenched from elevated-temperature cleavages 418 (1998) 132

L. Diederich, O.M. Küttel, P. Aebi and L. Schlapbach, Electron affinity and work function of differently oriented and doped diamond surfaces determined by photoelectron spectroscopy 418 (1998) 219

Y.D. Kim, S. Wendt, S. Schwegmann, H. Over and G. Ertl, Structural analyses of the pure and cesiated Ru(0001)–(2×2)-3O phase 418 (1998) 267

B.G. Frederick, T. Hildebrand, C.C. Perry, Q. Chen, A.W. Munz, Th. Bertrams, V. Zielasek, N.V. Richardson and M. Henzler, Inelastic diffraction in coadsorbed periodic structures 418 (1998) 407

A. Fedorus and E. Bauer, Structure and stability of metastable transition metal clusters on W(011) 418 (1998) 420

I. Zasada, M.A. Van Hove and G.A. Somorjai, Reanalysis of the Rh(111) + (2×2)-3NO structure using automated tensor LEED 418 (1998) L89

J. Lahtinen, J. Vaari and K. Kauraala, Adsorption and structure dependent desorption of CO on Co(0001) 418 (1998) 502

Reflection high-energy electron diffraction (RHEED)

J.M. McCoy, U. Korte and P.A. Maksym, Determination of the atomic geometry of the GaAs(001)2×4 surface by dynamical RHEED intensity analysis: The $\beta 2(2 \times 4)$ model 418 (1998) 273

Transmission high-energy electron diffraction

C. Collazo-Davila, D. Grozea, L.D. Marks, R. Feidenhans'l, M. Nielsen, L. Seehofer, L. Lottermoser, G. Falkenberg, R.L. Johnson, M. Göthelid and U. Karlsson, Solution of Ge(111)-(4×4)-Ag structure using direct methods applied to X-ray diffraction data 418 (1998) 395

Ellipsometry

J.W. Klaus, A.W. Ott, A.C. Dillon and S.M. George, Atomic layer controlled growth of Si_3N_4 films using sequential surface reactions 418 (1998) L14

Ion etching

P. Bond, P.N. Brier, J. Fletcher, W.J. Jia, H. Price and P.A. Gorry, Reactive scattering study of etching dynamics: Cl_2 on GaAs(100) 418 (1998) 181

Ion scattering spectroscopy

Low energy ion scattering (LEIS)

V.V. Khvostov, V.G. Babaev, O.Yu. Sokol, E.N. Shouleshov and M.B. Guseva, Ion neutralization at ionic crystal surfaces 418 (1998) L20

Laser methods

Laser induced thermal desorption (LITD)

L.A. Okada, A.C. Dillon, A.W. Ott and S.M. George, Adsorption and decomposition of 1,4-disilabutane ($SiH_3CH_2CH_2SiH_3$) on Si(100)2 × 1 and porous silicon surfaces 418 (1998) 353

Molecular beam epitaxy

B. Müller, T. Kuhlmann, K. Lischka, H. Schwer, R. Resel and G. Leising, MBE growth of *para*-hexaphenyl on GaAs(001)-2 × 4 418 (1998) 256

Molecule–solid reactions

W.A. Diño, H. Kasai and A. Okiji, Dynamical quantum filtering in hydrogen–surface reactions 418 (1998) L39

P. Bond, P.N. Brier, J. Fletcher, W.J. Jia, H. Price and P.A. Gorry, Reactive scattering study of etching dynamics: Cl_2 on GaAs(100) 418 (1998) 181

Molecule–solid scattering and diffraction – inelastic

P. Bond, P.N. Brier, J. Fletcher, W.J. Jia, H. Price and P.A. Gorry, Reactive scattering study of etching dynamics: Cl_2 on GaAs(100) 418 (1998) 181

Non-linear optical methods

Sum frequency generation

B. Bourguignon, S. Carrez, B. Dragnea and H. Dubost, Vibrational spectroscopy of imperfect CO/Pd(111) surfaces obtained by adsorption between 150 and 230 K 418 (1998) 171

Photoelectron spectroscopy

G. Zhuang, Y. Chen and P.N. Ross, Jr., The reaction of lithium with carbon dioxide studied by photoelectron spectroscopy 418 (1998) 139

L. Diederich, O.M. Küttel, P. Aebi and L. Schlapbach, Electron affinity and work function of differently oriented and doped diamond surfaces determined by photoelectron spectroscopy 418 (1998) 219

D. Schlatterbeck, M. Parschau and K. Christmann, Silver films grown on a rhenium (0001) surface: a combined TDS, XPS, and $\Delta\Phi$ study 418 (1998) 240

Soft X-ray photoelectron spectroscopy (using synchrotron radiation)

M. Wiklund, A. Jaworowski, F. Strisland, A. Beutler, A. Sandell, R. Nyholm, S.L. Sorensen and J.N. Andersen, Vibrational fine structure in the C 1s photoemission spectrum of the methoxy species chemisorbed on Cu(100) 418 (1998) 210

X-ray photoelectron spectroscopy

D. Schlatterbeck, M. Parschau and K. Christmann, Silver films grown on a rhenium (0001) surface: a combined TDS, XPS, and $\Delta\Phi$ study 418 (1998) 240

H.H. Huang, X. Jiang, H.L. Siew, W.S. Chin and G.Q. Xu, Oxygen coadsorption and reaction with potassium on MgO thin films grown on Ru(001) 418 (1998) 320

D.Y. Zemlyanov, E. Savinova, A. Scheybal, K. Doblhofer and R. Schlögl, XPS observation of OH groups incorporated in an Ag(111) electrode 418 (1998) 441

J. Lahtinen, J. Vaari and K. Kauraala, Adsorption and structure dependent desorption of CO on Co(0001) 418 (1998) 502

P.J. Knight, R. Toomes, S.M. Driver and D.P. Woodruff, Oxidation of the Cu(100)c(2 × 2)-Mn surface: epitaxial manganese oxide 418 (1998) 521

Synchrotron radiation photoelectron spectroscopy

T. Jirsak, J.A. Rodriguez, S. Chaturvedi and J. Hrbek, Chemistry of SO_2 on Ru(001): formation of SO_3 and SO_4 418 (1998) 8

W.-H. Hung, J.-T. Hsieh, H.-L. Hwang, H.-Y. Hwang and C.-C. Chang, Surface etching of InP(100) by chlorine 418 (1998) 46

T.-W. Pi, C.-P. Cheng and I.-H. Hong, Si 2p core level spectroscopy in Si(001)2 × 1: the charge-transfer effect 418 (1998) 113

M. Wiklund, A. Jaworowski, F. Strisland, A. Beutler, A. Sandell, R. Nyholm, S.L. Sorensen and J.N. Andersen, Vibrational fine structure in the C 1s photoemission spectrum of the methoxy species chemisorbed on Cu(100) 418 (1998) 210

A. Beutler, A. Sandell, A.J. Jaworowski, M. Wiklund, R. Nyholm and J.N. Andersen, The influence of preadsorbed oxygen on the adsorption of CO on two-dimensional Pd islands on a Rh(111) surface 418 (1998) 457

Photon absorption spectroscopy

K.T. Queeney, C.R. Arumainayagam, A. Balaji and C.M. Friend, Carbon–carbon coupling from formaldehyde reaction on Mo(110) 418 (1998) L31

Infrared absorption spectroscopy

J.W. Klaus, A.W. Ott, A.C. Dillon and S.M. George, Atomic layer controlled growth of Si_3N_4 films using sequential surface reactions 418 (1998) L14

K.T. Queeney, C.R. Arumainayagam, A. Balaji and C.M. Friend, Carbon–carbon coupling from formaldehyde reaction on Mo(110) 418 (1998) L31

B. Bourguignon, S. Carrez, B. Dragnea and H. Dubost, Vibrational spectroscopy of imperfect CO/Pd(111) surfaces obtained by adsorption between 150 and 230 K 418 (1998) 171

L.A. Okada, A.C. Dillon, A.W. Ott and S.M. George, Adsorption and decomposition of 1,4-disilabutane ($SiH_3CH_2CH_2SiH_3$) on Si(100)2 × 1 and porous silicon surfaces 418 (1998) 353

Plasma processing

S. Ramalingam, D. Maroudas, E.S. Aydil and S.P. Walch, Abstraction of hydrogen by SiH_3 from hydrogen-terminated Si(001)-(2 × 2) surfaces 418 (1998) L8

Reflection spectroscopy

M.J. Pilling, P. Gardner, M.E. Pemble and M. Surman, A far-infrared RAIRS investigation of $SnCl_4$ on a silica surface using the buried metal layer approach 418 (1998) L1

J.-K. Hansen, J. Bremer and O. Hunderi, The electronic structure of Cu(110) and Ag(110) surfaces studied by reflection anisotropy spectroscopy 418 (1998) L58

Scanning tunneling microscopy

R. Pechou, R. Coratger, F. Ajustron and J. Beauvillain, Control of light emission from an STM and surface modifications 418 (1998) 1

C. Schwennicke, X.-S. Wang, T.L. Einstein and E.D. Williams, Evolution of surface morphology of vicinal Si(111) surfaces after aluminum deposition 418 (1998) 22

P. Stone, S. Poulston, R.A. Bennett, N.J. Price and M. Bowker, An STM, TPD and XPS investigation of formic acid adsorption on the oxygen-precovered $c(6 \times 2)$ surface of Cu(110) 418 (1998) 71

R. Strohmaier, J. Petersen, B. Gompf and W. Eisenmenger, A systematic STM study of planar aromatic molecules on inorganic substrates. I. Submolecular image contrast 418 (1998) 91

R.-M. Rummel and C. Ziegler, 5849 418 (1998) 303

C.M. Schmidt, D.M. Schaller, F. Meisinger, D.E. Bürgler and H.-J. Güntherodt, Solid phase epitaxy of a ternary system 418 (1998) 314

R. Akiyama, T. Matsumoto and T. Kawai, Dipole-controlled manipulation of DNA base molecules 418 (1998) L73

J. Abellán, R. Chicón and A. Arenas, Properties of nanowires in air. Controlled values of conductance 418 (1998) 493

I.S. Tilinin, M.K. Rose, J.C. Dunphy, M. Salmeron and M.A. Van Hove, Identification of adatoms on metal surfaces by STM: experiment and theory 418 (1998) 511

P.J. Knight, R. Toomes, S.M. Driver and D.P. Woodruff, Oxidation of the Cu(100)c(2 × 2)-Mn surface: epitaxial manganese oxide 418 (1998) 521

Scanning tunneling spectroscopies

R.-M. Rummel and C. Ziegler, Room temperature adsorption of aniline ($C_6H_5NH_2$) on Si(100)(2 × 1) observed with scanning tunneling microscopy 418 (1998) 303

Solid phase epitaxy

C.M. Schmidt, D.M. Schaller, F. Meisinger, D.E. Bürgler and H.-J. Güntherodt, Solid phase epitaxy of a ternary system 418 (1998) 314

Thermal desorption spectroscopy

Th. Zecho, B. Brandner and J. Küppers, Abstraction of D adsorbed on Pt(100) surfaces by gaseous H atoms: effect of surface heterogeneity 418 (1998) L26

P. Stone, S. Poulston, R.A. Bennett, N.J. Price and M. Bowker, An STM, TPD and XPS investigation of formic acid adsorption on the oxygen-precovered $c(6 \times 2)$ surface of Cu(110) 418 (1998) 71

D. Schlatterbeck, M. Parschau and K. Christmann, Silver films grown on a rhenium (0001) surface: a combined TDS, XPS, and $\Delta\Phi$ study 418 (1998) 240

H.H. Huang, X. Jiang, H.L. Siew, W.S. Chin and G.Q. Xu, Oxygen coadsorption and reaction with potassium on MgO thin films grown on Ru(001) 418 (1998) 320

L.A. Okada, A.C. Dillon, A.W. Ott and S.M. George, Adsorption and decomposition of 1,4-disilabutane ($SiH_3CH_2CH_2SiH_3$) on Si(100)2 × 1 and porous silicon surfaces 418 (1998) 353

J. Lahtinen, J. Vaari and K. Kauraala, Adsorption and structure dependent desorption of CO on Co(0001) 418 (1998) 502

Work function measurements

D. Schlatterbeck, M. Parschau and K. Christmann, Silver films grown on a rhenium (0001) surface: a combined TDS, XPS, and $\Delta\Phi$ study 418 (1998) 240

A. Fedorus and E. Bauer, Structure and stability of metastable transition metal clusters on W(011) 418 (1998) 420

X-ray scattering, diffraction, and reflection

D. Grozea, E. Landree, L.D. Marks, R. Feidenhans'l, M. Nielsen and R.L. Johnson, Direct methods determination of the Si(111)-(6 × 6)Au surface structure 418 (1998) 32

H.L. Meyerheim, M. De Santis, W. Moritz and I.K. Robinson, Domain-wall interactions in Bi/Cu(001) 418 (1998) 295

C. Collazo-Davila, D. Grozea, L.D. Marks, R. Feidenhans'l, M. Nielsen, L. Seehofer, L. Lottermoser, G. Falkenberg, R.L. Johnson, M. Göthelid and U. Karlsson, Solution of Ge(111)-(4 × 4)-Ag structure using direct methods applied to X-ray diffraction data 418 (1998) 395

M.C. Saint-Lager, R. Baudoing-Savois, M. De Santis, P. Dolle and Y. Gauthier, Thickness effect on alloying of ultrathin Co films on Pt(111): a real time and in situ UHV study with synchrotron X-ray diffraction 418 (1998) 485

PHENOMENA

Adsorption kinetics

M. Bełtowska-Brzezinska, T. Łuczak and R. Holze, On adsorption of monohydric alcohols and diols at sp and sd metal electrodes 418 (1998) 281

A. Beutler, A. Sandell, A.J. Jaworowski, M. Wiklund, R. Nyholm and J.N. Andersen, The influence of preadsorbed oxygen on the adsorption of CO on two-dimensional Pd islands on a Rh(111) surface 418 (1998) 457

D. Welipitiya, C. Waldfried, C.N. Borca, P.A. Dowben, N.M. Boag, H. Jiang, I. Gobulukoglu and B.W. Robertson, The adsorption of nickelocene. Part 2: decomposition and selective area deposition 418 (1998) 466

Catalysis

K.T. Queeney, C.R. Arumainayagam, A. Balaji and C.M. Friend, Carbon–carbon coupling from formaldehyde reaction on Mo(110) 418 (1998) L31

T. Jirsak, J.A. Rodriguez, S. Chaturvedi and J. Hrbek, Chemistry of SO_2 on Ru(001): formation of SO_3 and SO_4 418 (1998) 8

P. Stone, S. Poulston, R.A. Bennett, N.J. Price and M. Bowker, An STM, TPD and XPS investigation of formic acid adsorption on the oxygen-precovered $c(6 \times 2)$ surface of Cu(110) 418 (1998) 71

V.P. Zhdanov and B. Kasemo, Non-thermal surface roughening in catalytic reactions 418 (1998) 84
T. Mitrelias, Acoustic excitation influence on the oscillatory CO oxidation reaction over a Pt{110} crystal 418 (1998) 105

Chemisorption

M.J. Pilling, P. Gardner, M.E. Pemble and M. Surman, A far-infrared RAIRS investigation of $SnCl_4$ on a silica surface using the buried metal layer approach 418 (1998) L1
W.A. Diño, H. Kasai and A. Okiji, Dynamical quantum filtering in hydrogen–surface reactions 418 (1998) L39
T. Jirsak, J.A. Rodriguez, S. Chaturvedi and J. Hrbek, Chemistry of SO_2 on Ru(001): formation of SO_3 and SO_4 418 (1998) 8
P. Stone, S. Poulston, R.A. Bennett, N.J. Price and M. Bowker, An STM, TPD and XPS investigation of formic acid adsorption on the oxygen-precovered $c(6 \times 2)$ surface of Cu(110) 418 (1998) 71
T. Bredov, E. Aprà, M. Catti and G. Pacchioni, Cluster and periodic ab-initio calculations on $K/TiO_2(110)$ 418 (1998) 150
B. Bourguignon, S. Carrez, B. Dragnea and H. Dubost, Vibrational spectroscopy of imperfect CO/Pd(111) surfaces obtained by adsorption between 150 and 230 K 418 (1998) 171
P. Bond, P.N. Brier, J. Fletcher, W.J. Jia, H. Price and P.A. Gorry, Reactive scattering study of etching dynamics: Cl_2 on GaAs(100) 418 (1998) 181
M. Wiklund, A. Jaworowski, F. Strisland, A. Beutler, A. Sandell, R. Nyholm, S.L. Sorensen and J.N. Andersen, Vibrational fine structure in the C 1s photoemission spectrum of the methoxy species chemisorbed on Cu(100) 418 (1998) 210
Y.D. Kim, S. Wendt, S. Schwegmann, H. Over and G. Ertl, Structural analyses of the pure and cesiated Ru(0001)–(2 × 2)-3O phase 418 (1998) 267
R.-M. Rummel and C. Ziegler, Room temperature adsorption of aniline ($C_6H_5NH_2$) on Si(100)(2 × 1) observed with scanning tunneling microscopy 418 (1998) 303
J.-K. Hansen, J. Bremer and O. Hunderi, The electronic structure of Cu(110) and Ag(110) surfaces studied by reflection anisotropy spectroscopy 418 (1998) L58
E.E. Mola, V.A. Ranea and J.L. Vicente, Underlayer chemisorption of C on Al(111) 418 (1998) 367
P. Paredes Olivera, E.M. Patrito and H. Sellers, Adsorption of sulfate, bisulfate and sulfuric acid on silver surfaces: a theoretical study 418 (1998) 376
A. Beutler, A. Sandell, A.J. Jaworowski, M. Wiklund, R. Nyholm and J.N. Andersen, The influence of preadsorbed oxygen on the adsorption of CO on two-dimensional Pd islands on a Rh(111) surface 418 (1998) 457
I. Zasada, M.A. Van Hove and G.A. Somorjai, Reanalysis of the Rh(111) + (2 × 2)-3NO structure using automated tensor LEED 418 (1998) L89
I.S. Tilinin, M.K. Rose, J.C. Dunphy, M. Salmeron and M.A. Van Hove, Identification of adatoms on metal surfaces by STM: experiment and theory 418 (1998) 511

Compound formation

Y.D. Kim, S. Wendt, S. Schwegmann, H. Over and G. Ertl, Structural analyses of the pure and cesiated Ru(0001)–(2 × 2)-3O phase 418 (1998) 267

Conductivity

J. Abellán, R. Chicón and A. Arenas, Properties of nanowires in air. Controlled values of conductance 418 (1998) 493

Crystallization

C.M. Schmidt, D.M. Schaller, F. Meisinger, D.E. Bürgler and H.-J. Güntherodt, Solid phase epitaxy of a ternary system 418 (1998) 314

Dielectric phenomena

J. Padilla and D. Vanderbilt, Ab initio study of $SrTiO_3$ surfaces 418 (1998) 64

Diffusion and migration

R. Akiyama, T. Matsumoto and T. Kawai, Dipole-controlled manipulation of DNA base molecules 418 (1998) L73

Electron–solid interactions

J.M. McCoy, U. Korte and P.A. Maksym, Determination of the atomic geometry of the GaAs(001)2 × 4 surface by dynamical RHEED intensity analysis: The β2(2 × 4) model 418 (1998) 273
B.G. Frederick, T. Hildebrand, C.C. Perry, Q. Chen, A.W. Munz, Th. Bertrams, V. Zielasek, N.V. Richardson and M. Henzler, Inelastic diffraction in coadsorbed periodic structures 418 (1998) 407

Epitaxy

C. Schwennicke, X.-S. Wang, T.L. Einstein and E.D. Williams, Evolution of surface morphology of vicinal Si(111) surfaces after aluminum deposition 418 (1998) 22
R. Strohmaier, J. Petersen, B. Gompf and W. Eisenmenger, A systematic STM study of planar aromatic molecules on inorganic substrates. I. Submolecular image contrast 418 (1998) 91
D. Schlatterbeck, M. Parschau and K. Christmann, Silver films grown on a rhenium (0001) surface: a combined TDS, XPS, and $\Delta\Phi$ study 418 (1998) 240
T. Fujita and K. Tanaka, Controlled epitaxial growth of Cu and Ni islands on oxygen-preadsorbed Cu(100) surfaces 418 (1998) L45
L.A. Zepeda-Ruiz, D. Maroudas and W.H. Weinberg, Semicoherent interface formation and structure in InAs/GaAs(111)A heteroepitaxy 418 (1998) L68
P.J. Knight, R. Toomes, S.M. Driver and D.P. Woodruff, Oxidation of the Cu(100)c(2 × 2)-Mn surface: epitaxial manganese oxide 418 (1998) 521

Etching

W.-H. Hung, J.-T. Hsieh, H.-L. Hwang, H.-Y. Hwang and C.-C. Chang, Surface etching of InP(100) by chlorine 418 (1998) 46

Evaporation and sublimation

D. Schlatterbeck, M. Parschau and K. Christmann, Silver films grown on a rhenium (0001) surface: a combined TDS, XPS, and $\Delta\Phi$ study 418 (1998) 240

Faceting

A. Pavlovska, K. Starbova, N. Starbov and E. Bauer, Impurity-induced faceting of Pb surfaces 418 (1998) 122

Field evaporation

R. Akiyama, T. Matsumoto and T. Kawai, Dipole-controlled manipulation of DNA base molecules 418 (1998) L73

Friction

P.B. Merrill and S.S. Perry, Fundamental measurements of the friction of clean and oxygen-covered VC(100) with ultrahigh vacuum atomic force microscopy: evidence for electronic contributions to interfacial friction 418 (1998) 342

Growth

S. Ramalingam, D. Maroudas, E.S. Aydil and S.P. Walch, Abstraction of hydrogen by SiH_3 from hydrogen-terminated Si(001)-(2 × 2) surfaces 418 (1998) L8

J.W. Klaus, A.W. Ott, A.C. Dillon and S.M. George, Atomic layer controlled growth of Si_3N_4 films using sequential surface reactions 418 (1998) L14

R.H. Miwa, Theoretical study of Si–Ge mixed dimers on Si(001) surfaces 418 (1998) 55

D. Schlatterbeck, M. Parschau and K. Christmann, Silver films grown on a rhenium (0001) surface: a combined TDS, XPS, and $\Delta\Phi$ study 418 (1998) 240

T. Fujita and K. Tanaka, Controlled epitaxial growth of Cu and Ni islands on oxygen-preadsorbed Cu(100) surfaces 418 (1998) L45

Nucleation

B. Müller, T. Kuhlmann, K. Lischka, H. Schwer, R. Resel and G. Leising, MBE growth of *para*-hexaphenyl on GaAs(001)-2 × 4 418 (1998) 256

Oxidation

H.H. Huang, X. Jiang, H.L. Siew, W.S. Chin and G.Q. Xu, Oxygen coadsorption and reaction with potassium on MgO thin films grown on Ru(001) 418 (1998) 320

P.J. Knight, R. Toomes, S.M. Driver and D.P. Woodruff, Oxidation of the Cu(100)c(2 × 2)-Mn surface: epitaxial manganese oxide 418 (1998) 521

Physical adsorption

P. Bond, P.N. Brier, J. Fletcher, W.J. Jia, H. Price and P.A. Gorry, Reactive scattering study of etching dynamics: Cl_2 on GaAs(100) 418 (1998) 181

Quantum effects

W.A. Diño, H. Kasai and A. Okiji, Dynamical quantum filtering in hydrogen–surface reactions 418 (1998) L39

Sputtering

A. Pavlovska, K. Starbova, N. Starbov and E. Bauer, Impurity-induced faceting of Pb surfaces 418 (1998) 122

Surface chemical reaction

S. Ramalingam, D. Maroudas, E.S. Aydil and S.P. Walch, Abstraction of hydrogen by SiH_3 from hydrogen-terminated Si(001)-(2 × 2) surfaces 418 (1998) L8

J.W. Klaus, A.W. Ott, A.C. Dillon and S.M. George, Atomic layer controlled growth of Si_3N_4 films using sequential surface reactions 418 (1998) L14

Th. Zecho, B. Brandner and J. Küppers, Abstraction of D adsorbed on Pt(100) surfaces by gaseous H atoms: effect of surface heterogeneity 418 (1998) L26

K.T. Queeney, C.R. Arumainayagam, A. Balaji and C.M. Friend, Carbon–carbon coupling from formaldehyde reaction on Mo(110) 418 (1998) L31

W.A. Diño, H. Kasai and A. Okiji, Dynamical quantum filtering in hydrogen–surface reactions 418 (1998) L39

P. Stone, S. Poulston, R.A. Bennett, N.J. Price and M. Bowker, An STM, TPD and XPS investigation of formic acid adsorption on the oxygen-precovered $c(6 \times 2)$ surface of Cu(110) 418 (1998) 71

G. Zhuang, Y. Chen and P.N. Ross, Jr., The reaction of lithium with carbon dioxide studied by photoelectron spectroscopy 418 (1998) 139

P. Bond, P.N. Brier, J. Fletcher, W.J. Jia, H. Price and P.A. Gorry, Reactive scattering study of etching dynamics: Cl_2 on GaAs(100) 418 (1998) 181

Y.D. Kim, S. Wendt, S. Schwegmann, H. Over and G. Ertl, Structural analyses of the pure and cesiated Ru(0001)–(2 × 2)-3O phase 418 (1998) 267

L.A. Okada, A.C. Dillon, A.W. Ott and S.M. George, Adsorption and decomposition of 1,4-disilabutane ($SiH_3CH_2CH_2SiH_3$) on Si(100)2 × 1 and porous silicon surfaces 418 (1998) 353

R. Cavicchi, V. Sukharev and S. Semancik, Time-dependent conductance of Pd-dosed SnO_2 (110) 418 (1998) L81

Surface diffusion

A.G. Mikhin and N. de Diego, Surface vacancy diffusion on Cu(111): a computer simulation study 418 (1998) 166

R. Akiyama, T. Matsumoto and T. Kawai, Dipole-controlled manipulation of DNA base molecules 418 (1998) L73

A. Beutler, A. Sandell, A.J. Jaworowski, M. Wiklund, R. Nyholm and J.N. Andersen, The influence of preadsorbed oxygen on the adsorption of CO on two-dimensional Pd islands on a Rh(111) surface 418 (1998) 457

Surface electrical transport (surface conductivity, surface recombination, etc.)

R. Cavicchi, V. Sukharev and S. Semancik, Time-dependent conductance of Pd-dosed SnO_2 (110) 418 (1998) L81

Surface electronic phenomena (work function, surface potential, surface states, etc.)

T.-W. Pi, C.-P. Cheng and I.-H. Hong, Si 2p core level spectroscopy in Si(001)2 × 1: the charge-transfer effect 418 (1998) 113

T. Bredov, E. Aprà, M. Catti and G. Pacchioni, Cluster and periodic ab-initio calculations on $K/TiO_2(110)$ 418 (1998) 150
J.-K. Hansen, J. Bremer and O. Hunderi, The electronic structure of Cu(110) and Ag(110) surfaces studied by reflection anisotropy spectroscopy 418 (1998) L58
R. Akiyama, T. Matsumoto and T. Kawai, Dipole-controlled manipulation of DNA base molecules 418 (1998) L73
A. Fedorus and E. Bauer, Structure and stability of metastable transition metal clusters on W(011) 418 (1998) 420

Surface energy

J. Padilla and D. Vanderbilt, Ab initio study of $SrTiO_3$ surfaces 418 (1998) 64
Q. Ge, D.A. King, N. Marzari and M.C. Payne, First principles calculation of the energy and structure of two solid surface phases on Ir{100} 418 (1998) 529

Surface relaxation and reconstruction

D. Grozea, E. Landree, L.D. Marks, R. Feidenhans'l, M. Nielsen and R.L. Johnson, Direct methods determination of the Si(111)-(6 × 6)Au surface structure 418 (1998) 32
J. Padilla and D. Vanderbilt, Ab initio study of $SrTiO_3$ surfaces 418 (1998) 64
D. Zhao and D. Haneman, LEED structures in Si(111) surfaces quenched from elevated-temperature cleavages 418 (1998) 132
J.-K. Hansen, J. Bremer and O. Hunderi, The electronic structure of Cu(110) and Ag(110) surfaces studied by reflection anisotropy spectroscopy 418 (1998) L58
P.C. Kelires, Theoretical investigation of the equilibrium surface structure of $Si_{1-x-y}Ge_xC_y$ alloys 418 (1998) L62
C. Collazo-Davila, D. Grozea, L.D. Marks, R. Feidenhans'l, M. Nielsen, L. Seehofer, L. Lottermoser, G. Falkenberg, R.L. Johnson, M. Göthelid and U. Karlsson, Solution of Ge(111)-(4 × 4)-Ag structure using direct methods applied to X-ray diffraction data 418 (1998) 395

Surface roughening

V.P. Zhdanov and B. Kasemo, Non-thermal surface roughening in catalytic reactions 418 (1998) 84

Surface segregation

L. Rubinovich and M. Polak, On the surface composition of intermetallic compounds: the case of $MgNi_2$ 418 (1998) L53
P.C. Kelires, Theoretical investigation of the equilibrium surface structure of $Si_{1-x-y}Ge_xC_y$ alloys 418 (1998) L62

Surface structure, morphology, roughness, and topography

C. Schwennicke, X.-S. Wang, T.L. Einstein and E.D. Williams, Evolution of surface morphology of vicinal Si(111) surfaces after aluminum deposition 418 (1998) 22
P. Stone, S. Poulston, R.A. Bennett, N.J. Price and M. Bowker, An STM, TPD and XPS investigation of formic acid adsorption on the oxygen-precovered $c(6 \times 2)$ surface of Cu(110) 418 (1998) 71
L. Diederich, O.M. Küttel, P. Aebi and L. Schlapbach, Electron affinity and work function of differently oriented and doped diamond surfaces determined by photoelectron spectroscopy 418 (1998) 219
B. Müller, T. Kuhlmann, K. Lischka, H. Schwer, R. Resel and G. Leising, MBE growth of *para*-hexaphenyl on GaAs(001)-2 × 4 418 (1998) 256
Y.D. Kim, S. Wendt, S. Schwegmann, H. Over and G. Ertl, Structural analyses of the pure and cesiated Ru(0001)–(2 × 2)-3O phase 418 (1998) 267
J.M. McCoy, U. Korte and P.A. Maksym, Determination of the atomic geometry of the GaAs(001)2 × 4 surface by dynamical RHEED intensity analysis: The β2(2 × 4) model 418 (1998) 273
H.L. Meyerheim, M. De Santis, W. Moritz and I.K. Robinson, Domain-wall interactions in Bi/Cu(001) 418 (1998) 295
A. Fedorus and E. Bauer, Structure and stability of metastable transition metal clusters on W(011) 418 (1998) 420
J. Lahtinen, J. Vaari and K. Kauraala, Adsorption and structure dependent desorption of CO on Co(0001) 418 (1998) 502
Q. Ge, D.A. King, N. Marzari and M.C. Payne, First principles calculation of the energy and structure of two solid surface phases on Ir{100} 418 (1998) 529

Surface thermodynamics (including phase transitions)

C. Schwennicke, X.-S. Wang, T.L. Einstein and E.D. Williams, Evolution of surface morphology of vicinal Si(111) surfaces after aluminum deposition 418 (1998) 22
M.C. Saint-Lager, R. Baudoing-Savois, M. De Santis, P. Dolle and Y. Gauthier, Thickness effect on alloying of ultrathin Co films on Pt(111): a real time and in situ UHV study with synchrotron X-ray diffraction 418 (1998) 485

Surface waves

Acoustic waves

T. Mitrelias, Acoustic excitation influence on the oscillatory CO oxidation reaction over a Pt{110} crystal 418 (1998) 105

Plasmons

R. Pechou, R. Coratger, F. Ajustron and J. Beauvillain, Control of light emission from an STM and surface modifications 418 (1998) 1

Thermal desorption

P. Stone, S. Poulston, R.A. Bennett, N.J. Price and M. Bowker, An STM, TPD and XPS investigation of formic acid adsorption on the oxygen-precovered $c(6 \times 2)$ surface of Cu(110) 418 (1998) 71
D. Schlatterbeck, M. Parschau and K. Christmann, Silver films grown on a rhenium (0001) surface: a combined TDS, XPS, and $\Delta\Phi$ study 418 (1998) 240
W.T. Lee, F. Thomas and R.I. Masel, Methanol oxidation on (2 × 1)Pt(110): does the C–O or O–H bond break first? 418 (1998) 479

Tribology

P.B. Merrill and S.S. Perry, Fundamental measurements of the friction of clean and oxygen-covered VC(100) with ultrahigh vacuum atomic force microscopy: evidence for electronic contributions to interfacial friction 418 (1998) 342

Tunneling

R. Strohmaier, J. Petersen, B. Gompf and W. Eisenmenger, A systematic STM study of planar aromatic molecules on inorganic substrates. I. Submolecular image contrast 418 (1998) 91

Vibrations of adsorbed molecules

M. Wiklund, A. Jaworowski, F. Strisland, A. Beutler, A. Sandell, R. Nyholm, S.L. Sorensen and J.N. Andersen, Vibrational fine structure in the C 1s photoemission spectrum of the methoxy species chemisorbed on Cu(100) 418 (1998) 210

B.G. Frederick, T. Hildebrand, C.C. Perry, Q. Chen, A.W. Munz, Th. Bertrams, V. Zielasek, N.V. Richardson and M. Henzler, Inelastic diffraction in coadsorbed periodic structures 418 (1998) 407